

SEARCH COPY

PCT

## REQUEST

Sheet No. 1 of 8

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving Office use only

PCT/US 03/23426

International Application No.

(25.07.03)

International Filing Date

25 JUL 2003

PCT INTERNATIONAL  
APPLICATION FORMS

Name of receiving Office for "International Application"

Applicant's or agent's file reference  
(if desired) (12 characters maximum) 12504.464

Box No. I TITLE OF INVENTION		MICROREACTOR WITH CONTROLLABLE PRESSURE AND TEMPERATURE FOR IN SITU MATERIAL INVESTIGATIONS			
Box No. II APPLICANT		<input type="checkbox"/> This person is also inventor  Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) ARIZONA BOARD OF REGENTS, a body corporate of the State of Arizona, acting for and on behalf of ARIZONA STATE UNIVERSITY  Box 873511 Tempe, Arizona 85287 United States of America			
State (that is, country) of nationality: US		State (that is, country) of residence: US			
This person is applicant for the purposes of:		<input type="checkbox"/> all designated States	<input checked="" type="checkbox"/> all designated States except the United States of America	<input type="checkbox"/> the United States of America only	<input type="checkbox"/> the States indicated in the Supplemental Box
Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)					
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)  McKELVY, Michael J. 431 N. Diane Court Chandler, Arizona 85226 United States of America		This person is: <input type="checkbox"/> applicant only <input checked="" type="checkbox"/> applicant and inventor <input type="checkbox"/> inventor only. (If this check-box is marked, do not fill in below.)  Applicant's registration No. with the Office			
State (that is, country) of nationality: US		State (that is, country) of residence: US			
This person is applicant for the purposes of:		<input type="checkbox"/> all designated States	<input type="checkbox"/> all designated States except the United States of America	<input checked="" type="checkbox"/> the United States of America only	<input type="checkbox"/> the States indicated in the Supplemental Box
<input checked="" type="checkbox"/> Further applicants and/or (further) inventors are indicated on a continuation sheet.					
Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE					
The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:		<input checked="" type="checkbox"/> agent			
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)  ONEY, Richard E. FENNEMORE CRAIG 3003 North Central, Suite 2600 Phoenix, Arizona 85012-2913 United States of America		Telephone No. (602) 916-5303 Facsimile No. (602) 916-5503 Teleprinter No.  Agent's registration No. with the Office US 36,884			
<input type="checkbox"/> Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.					

**Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)***If none of the following sub-boxes is used, this sheet should not be included in the request.*

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

DIEFENBACHER, Jason

1114 E Gwen Street  
Phoenix, AZ 85042  
United States of America

This person is:

applicant only  
 applicant and inventor  
 inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality: US

State (that is, country) of residence: US

This person is applicant for the purposes of:

 all designated States all designated States except the United States of America the United States of America only the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

WOLF, George H.

616 S. Esquire Way  
Mesa, Arizona 85202  
United States of America

This person is:

applicant only  
 applicant and inventor  
 inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality: US

State (that is, country) of residence: US

This person is applicant for the purposes of:

 all designated States all designated States except the United States of America the United States of America only the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

CHIZMESHYA, Andrew V.

702 W. Curry Street  
Chandler, Arizona 85225  
United States of America

This person is:

applicant only  
 applicant and inventor  
 inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality: CA

State (that is, country) of residence: US

This person is applicant for the purposes of:

 all designated States all designated States except the United States of America the United States of America only the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

applicant only  
 applicant and inventor  
 inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:

 all designated States all designated States except the United States of America the United States of America only the States indicated in the Supplemental Box Further applicants and/or (further) inventors are indicated on another continuation sheet.

**Box No. V DESIGNATION OF STATES**

*Mark the applicable check-boxes below; at least one must be marked.*

The following designations are hereby made under Rule 4.9(a):

## Regional Patent

**AP** **ARIPO Patent:** GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, MZ Mozambique, SD Sudan, SL Sierra Leone, SZ Swaziland, TZ United Republic of Tanzania, UG Uganda, ZM Zambia, ZW Zimbabwe, and any other State which is a Contracting State of the Harare Protocol and of the PCT (*if other kind of protection or treatment desired, specify on dotted line*) . . . . .

**EA** **Eurasian Patent:** AM Armenia, AZ Azerbaijan, BY Belarus, KG Kyrgyzstan, KZ Kazakhstan, MD Republic of Moldova, RU Russian Federation, TJ Tajikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT

**EP** **European Patent:** AT Austria, BE Belgium, BG Bulgaria, CH & LI Switzerland and Liechtenstein, CY Cyprus, CZ Czech Republic, DE Germany, DK Denmark, EE Estonia, ES Spain, FI Finland, FR France, GB United Kingdom, GR Greece, IE Ireland, IT Italy, LU Luxembourg, MC Monaco, NL Netherlands, PT Portugal, SE Sweden, SK Slovakia, TR Turkey, and any other State which is a Contracting State of the European Patent Convention and of the PCT

**OA** **OAPI Patent:** BF Burkina Faso, BJ Benin, CF Central African Republic, CG Congo, CI Côte d'Ivoire, CM Cameroon, GA Gabon, GN Guinea, GQ Equatorial Guinea, GW Guinea-Bissau, ML Mali, MR Mauritania, NE Niger, SN Senegal, TD Chad, TG Togo, and any other State which is a member State of OAPI and a Contracting State of the PCT (*if other kind of protection or treatment desired, specify on dotted line*) . . . . .

**National Patent** (if other kind of protection or treatment desired, specify on dotted line):

<input type="checkbox"/> AE United Arab Emirates . . . . .	<input type="checkbox"/> GM Gambia . . . . .	<input type="checkbox"/> NZ New Zealand . . . . .
<input type="checkbox"/> AG Antigua and Barbuda . . . . .	<input type="checkbox"/> HR Croatia . . . . .	<input type="checkbox"/> OM Oman . . . . .
<input type="checkbox"/> AL Albania . . . . .	<input type="checkbox"/> HU Hungary . . . . .	<input type="checkbox"/> PH Philippines . . . . .
<input type="checkbox"/> AM Armenia . . . . .	<input type="checkbox"/> ID Indonesia . . . . .	<input type="checkbox"/> PL Poland . . . . .
<input type="checkbox"/> AT Austria . . . . .	<input type="checkbox"/> IL Israel . . . . .	<input type="checkbox"/> PT Portugal . . . . .
<input type="checkbox"/> AU Australia . . . . .	<input type="checkbox"/> IN India . . . . .	<input type="checkbox"/> RO Romania . . . . .
<input type="checkbox"/> AZ Azerbaijan . . . . .	<input type="checkbox"/> IS Iceland . . . . .	<input type="checkbox"/> RU Russian Federation . . . . .
<input type="checkbox"/> BA Bosnia and Herzegovina . . . . .	<input checked="" type="checkbox"/> JP Japan . . . . .	
<input type="checkbox"/> BB Barbados . . . . .	<input type="checkbox"/> KE Kenya . . . . .	<input type="checkbox"/> SD Sudan . . . . .
<input type="checkbox"/> BG Bulgaria . . . . .	<input type="checkbox"/> KG Kyrgyzstan . . . . .	<input type="checkbox"/> SE Sweden . . . . .
<input type="checkbox"/> BR Brazil . . . . .	<input type="checkbox"/> KP Democratic People's Republic of Korea . . . . .	<input type="checkbox"/> SG Singapore . . . . .
<input type="checkbox"/> BY Belarus . . . . .	<input type="checkbox"/> KR Republic of Korea . . . . .	<input type="checkbox"/> SI Slovenia . . . . .
<input type="checkbox"/> BZ Belize . . . . .	<input type="checkbox"/> KZ Kazakhstan . . . . .	<input type="checkbox"/> SK Slovakia . . . . .
<input checked="" type="checkbox"/> CA Canada . . . . .	<input type="checkbox"/> LC Saint Lucia . . . . .	<input type="checkbox"/> SL Sierra Leone . . . . .
<input type="checkbox"/> CH & LI Switzerland and Liechtenstein . . . . .	<input type="checkbox"/> LK Sri Lanka . . . . .	<input type="checkbox"/> TJ Tajikistan . . . . .
<input type="checkbox"/> CN China . . . . .	<input type="checkbox"/> LR Liberia . . . . .	<input type="checkbox"/> TM Turkmenistan . . . . .
<input type="checkbox"/> CO Colombia . . . . .	<input type="checkbox"/> LS Lesotho . . . . .	<input type="checkbox"/> TN Tunisia . . . . .
<input type="checkbox"/> CR Costa Rica . . . . .	<input type="checkbox"/> LT Lithuania . . . . .	<input type="checkbox"/> TR Turkey . . . . .
<input type="checkbox"/> CU Cuba . . . . .	<input type="checkbox"/> LU Luxembourg . . . . .	<input type="checkbox"/> TT Trinidad and Tobago . . . . .
<input type="checkbox"/> CZ Czech Republic . . . . .	<input type="checkbox"/> LV Latvia . . . . .	<input type="checkbox"/> TZ United Republic of Tanzania . . . . .
<input type="checkbox"/> DE Germany . . . . .	<input type="checkbox"/> MA Morocco . . . . .	<input type="checkbox"/> UA Ukraine . . . . .
<input type="checkbox"/> DK Denmark . . . . .	<input type="checkbox"/> MD Republic of Moldova . . . . .	<input type="checkbox"/> UG Uganda . . . . .
<input type="checkbox"/> DM Dominica . . . . .	<input type="checkbox"/> MG Madagascar . . . . .	<input checked="" type="checkbox"/> US United States of America . . . . .
<input type="checkbox"/> DZ Algeria . . . . .	<input type="checkbox"/> MK The former Yugoslav Republic of Macedonia . . . . .	
<input type="checkbox"/> EC Ecuador . . . . .	<input type="checkbox"/> MN Mongolia . . . . .	<input type="checkbox"/> UZ Uzbekistan . . . . .
<input type="checkbox"/> EE Estonia . . . . .	<input type="checkbox"/> MW Malawi . . . . .	<input type="checkbox"/> VN Viet Nam . . . . .
<input type="checkbox"/> ES Spain . . . . .	<input type="checkbox"/> MX Mexico . . . . .	<input type="checkbox"/> YU Yugoslavia . . . . .
<input type="checkbox"/> FI Finland . . . . .	<input type="checkbox"/> MZ Mozambique . . . . .	<input type="checkbox"/> ZA South Africa . . . . .
<input type="checkbox"/> GB United Kingdom . . . . .	<input type="checkbox"/> NO Norway . . . . .	<input type="checkbox"/> ZM Zambia . . . . .
<input type="checkbox"/> GD Grenada . . . . .		<input type="checkbox"/> ZW Zimbabwe . . . . .
<input type="checkbox"/> GE Georgia . . . . .		
<input type="checkbox"/> GH Ghana . . . . .		

Check-boxes below reserved for designating States which have become party to the PCT after issuance of this sheet:

.....  .....  .....

**Precautionary Designation Statement:** In addition to the designations made above, the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (*Confirmation (including fees) must reach the receiving Office within the 15-month time limit.*)

**Box No. VI PRIORITY CLAIM**

**The priority of the following earlier application(s) is hereby claimed:**

Filing date of earlier application (day/month/year)	Number of earlier application	Where earlier application is:		
		national application: country or Member of WTO	regional application: regional Office	international application: receiving Office
item (1) 26 July 2002 (26/07/2002)	60/398,689	US		
item (2)				
item (3)				
item (4)				
item (5)				

Further priority claims are indicated in the Supplemental Box.

The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (*only if the earlier application was filed with the Office which for the purposes of this international application is the receiving Office*) identified above as:

all items    item (1)    item (2)    item (3)    item (4)    item (5)    other, see  
Supplemental Box

\* Where the earlier application is an ARIPO application, indicate at least one country party to the Paris Convention for the Protection of Industrial Property or one Member of the World Trade Organization for which that earlier application was filed (Rule 4.10(b)(ii)): . . .

**Box No. VII INTERNATIONAL SEARCHING AUTHORITY**

**Choice of International Searching Authority (ISA) (if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used):**

ISA / US

**Request to use results of earlier search; reference to that search (if an earlier search has been carried out by or requested from the International Searching Authority):**

Date (day/month/year)

### Number

**Country (or regional Office)**

**Box No. VIII DECLARATIONS**

The following **declarations** are contained in Boxes Nos. VIII (i) to (v) (mark the applicable check-boxes below and indicate in the right column the number of each type of declaration):

### Number of declarations

<input type="checkbox"/>	Box No. VIII (i)	Declaration as to the identity of the inventor	:
<input checked="" type="checkbox"/>	Box No. VIII (ii)	Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent	:
<input type="checkbox"/>	Box No. VIII (iii)	Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application	:
<input checked="" type="checkbox"/>	Box No. VIII (iv)	Declaration of inventorship (only for the purposes of the designation of the United States of America)	:
<input type="checkbox"/>	Box No. VIII (v)	Declaration as to non-prejudicial disclosures or exceptions to lack of novelty	:

**Box No. VIII (ii) DECLARATION: ENTITLEMENT TO APPLY FOR AND BE GRANTED A PATENT**

*The declaration must conform to the standardized wording provided for in Section 212; see Notes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific Notes to Box No. VIII (ii). If this Box is not used, this sheet should not be included in the request.*

Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate:

in relation to this international application, ARIZONA BOARD OF REGENTS, a body corporate of the State of Arizona, acting for and on behalf of ARIZONA STATE UNIVERSITY is entitled to apply for and be granted a patent by virtue of an assignment from MCKELVY, Michael J., DIEFENBACHER, Jason, WOLF, George H., and CHIZMESHYA, Andrew V. to ARIZONA BOARD OF REGENTS, a body corporate of the State of Arizona, acting for and on behalf of ARIZONA STATE UNIVERSITY, dated

---

This declaration is made for the purposes of all designated states, except the designation of the United States of America.

This declaration is continued on the following sheet, "Continuation of Box No. VIII (ii)".

**Box No. VIII (iv) DECLARATION: INVENTORSHIP (only for the purposes of the designation of the United States of America)**  
*The declaration must conform to the following standardized wording provided for in Section 214; see Notes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific Notes to Box No. VIII (iv). If this Box is not used, this sheet should not be included in the request.*

**Declaration of inventorship (Rules 4.17(iv) and 51bis.1(a)(iv))  
 for the purposes of the designation of the United States of America:**

I hereby declare that I believe I am the original, first and sole (if only one inventor is listed below) or joint (if more than one inventor is listed below) inventor of the subject matter which is claimed and for which a patent is sought.

This declaration is directed to the international application of which it forms a part (if filing declaration with application).

This declaration is directed to international application No. PCT/..... (if furnishing declaration pursuant to Rule 26ter).

I hereby declare that my residence, mailing address, and citizenship are as stated next to my name.

I hereby state that I have reviewed and understand the contents of the above-identified international application, including the claims of said application. I have identified in the request of said application, in compliance with PCT Rule 4.10, any claim to foreign priority, and I have identified below, under the heading "Prior Applications," by application number, country or Member of the World Trade Organization, day, month and year of filing, any application for a patent or inventor's certificate filed in a country other than the United States of America, including any PCT international application designating at least one country other than the United States of America, having a filing date before that of the application on which foreign priority is claimed.

Prior Applications: 60/398,689 US 26 July 2002. ....  
 (26/07/2002) .....

I hereby acknowledge the duty to disclose information that is known by me to be material to patentability as defined by 37 C.F.R. § 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the PCT international filing date of the continuation-in-part application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name: McKELVY, Michael J. ....

US

Residence: .....  
 (city and either US state, if applicable, or country)

Mailing Address: 431 N. Diane Court  
 Chándlér, Arízona 85226  
 ..... United States of America .....

Citizenship: US .....

Inventor's Signature: .....  
 (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)

Date: .....  
 (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)

Name: DIEFENBACHER, Jason .....

US

Residence: .....  
 (city and either US state, if applicable, or country)

Mailing Address: 1114 E Gwen Street  
 Phoenix, AZ 85042  
 ..... United States of America .....

Citizenship: US .....

Inventor's Signature: .....  
 (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)

Date: .....  
 (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)

This declaration is continued on the following sheet, "Continuation of Box No. VIII (iv)".

**Continuation of Box No. VIII (i) to (v) DECLARATION**

If the space is insufficient in any of Boxes Nos. VIII (i) to (v) to furnish all the information, including in the case where more than two inventors are to be named in Box No. VIII (iv), in such case, write "Continuation of Box No. VIII ..." (indicate the item number of the Box) and furnish the information in the same manner as required for the purposes of the Box in which the space was insufficient. If additional space is needed in respect of two or more declarations, a separate continuation box must be used for each such declaration. If this Box is not used, this sheet should not be included in the request.

Continuation of Box VIII(iv):

WOLF, George H.

616 S. Esquire Way  
Mesa, Arizona 85202  
United States of America

Citizenship US

Residence US

Inventor's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

CHIZMESHYA, Andrew V.

702 W. Curry Street  
Chandler, Arizona 85225  
United States of America

Citizenship CA

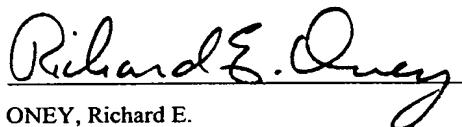
Residence US

Inventor's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## Box No. IX CHECK LIST; LANGUAGE OF FILING

This international application contains:		This international application is accompanied by the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item):		Number of items														
<p>(a) the following number of sheets in paper form:</p> <table> <tr><td>request (including declaration sheets)</td><td>:</td><td>8</td></tr> <tr><td>description (excluding sequence listing part)</td><td>:</td><td>10<sup>1</sup></td></tr> <tr><td>claims</td><td>:</td><td>4</td></tr> <tr><td>abstract</td><td>:</td><td>1</td></tr> <tr><td>drawings</td><td>:</td><td>5</td></tr> </table> <p><b>Sub-total number of sheets</b> : <u>21</u> <u>28</u></p> <p>sequence listing part of description (actual number of sheets if filed in paper form, whether or not also filed in computer readable form; see (b) below) : <u>0</u></p> <p><b>Total number of sheets</b> : <u>21</u> <u>28</u></p> <p>(b) sequence listing part of description filed in computer readable form</p> <p>(i) <input type="checkbox"/> only (under Section 801(a)(i))</p> <p>(ii) <input type="checkbox"/> in addition to being filed in paper form (under Section 801(a)(ii))</p> <p>Type and number of carriers (diskette, CD-ROM, CD-R or other) on which the sequence listing part is contained (additional copies to be indicated under item 9(ii), in right column): .....</p>		request (including declaration sheets)	:		8	description (excluding sequence listing part)	:	10 <sup>1</sup>	claims	:	4	abstract	:	1	drawings	:	5	<p>1. <input checked="" type="checkbox"/> fee calculation sheet</p> <p>2. <input type="checkbox"/> original separate power of attorney</p> <p>3. <input type="checkbox"/> original general power of attorney</p> <p>4. <input type="checkbox"/> copy of general power of attorney; reference number, if any: .....</p> <p>5. <input type="checkbox"/> statement explaining lack of signature</p> <p>6. <input type="checkbox"/> priority document(s) identified in Box No. VI as item(s): .....</p> <p>7. <input type="checkbox"/> translation of international application into (language): .....</p> <p>8. <input type="checkbox"/> separate indications concerning deposited microorganism or other biological material</p> <p>9. <input type="checkbox"/> sequence listing in computer readable form (indicate also type and number of carriers (diskette, CD-ROM, CD-R or other))</p> <p>(i) <input type="checkbox"/> copy submitted for the purposes of international search under Rule 13ter only (and not as part of the international application)</p> <p>(ii) <input type="checkbox"/> (only where check-box (b)(i) or (b)(ii) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Rule 13ter</p> <p>(iii) <input type="checkbox"/> together with relevant statement as to the identity of the copy or copies with the sequence listing part mentioned in left column</p> <p>10. <input checked="" type="checkbox"/> other (specify): Transmittal Letter .....</p>
request (including declaration sheets)	:	8																
description (excluding sequence listing part)	:	10 <sup>1</sup>																
claims	:	4																
abstract	:	1																
drawings	:	5																
Figure of the drawings which should accompany the abstract:	Fig. 2	Language of filing of the international application:																
Box No. X SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE																		
Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).																		



ONEY, Richard E.

Agent for Applicant

(25.07.03)

For receiving Office use only			
1. Date of actual receipt of the purported international application:		7T02 Rec'd PCT/PTO 25 JUL 2003	
3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:		2. Drawings:	
4. Date of timely receipt of the required corrections under PCT Article 11(2):		<input type="checkbox"/> received: <input type="checkbox"/> not received:	
5. International Searching Authority (if two or more are competent): ISA / US		6. <input type="checkbox"/> Transmittal of search copy delayed until search fee is paid	
For International Bureau use only			
Date of receipt of the record copy by the International Bureau:			

This sheet is not part of and does not count as a sheet of the international application.

**PCT****FEE CALCULATION SHEET**  
**Annex to the Request**Applicant's or agent's  
file reference 12504.464

For receiving Office use only

**PCT/US 03/23426**  
International Application No.

(15.07.03)

Date stamp of the receiving Office

25 JUL 2003

## Applicant

Arizona Board of Regents, Acting for and on Behalf of Arizona State University

**CALCULATION OF PRESCRIBED FEES**1. TRANSMITTAL FEE . . . . . 240  T  
2. SEARCH FEE . . . . . 700  S

International search to be carried out by US

(If two or more International Searching Authorities are competent to carry out the international search, indicate the name of the Authority which is chosen to carry out the international search.)

## 3. INTERNATIONAL FEE

## Basic Fee

Where item (b) of Box No. IX applies, enter Sub-total number of sheets } 28  
Where item (b) of Box No. IX does not apply, enter Total number of sheets } b1 first 30 sheets 476  b1 b2 0 x 12 = 0  b2  
number of sheets in excess of 30 fee per sheet b3 additional component (only if sequence listing part of description is filed in computer readable form under Section 801(a)(i), or both in that form and on paper, under Section 801(a)(ii)):400 x \_\_\_\_\_ =  b3  
fee per sheetAdd amounts entered at b1, b2 and b3 and enter total at B . . . . . 476  B

## Designation Fees

The international application contains 4 designations.

4 x 104 = 416  D  
number of designation fees amount of designation fee  
payable (maximum 5)Add amounts entered at B and D and enter total at I . . . . . 892  I

(Applicants from certain States are entitled to a reduction of 75% of the international fee. Where the applicant is (or all applicants are) so entitled, the total to be entered at I is 25% of the sum of the amounts entered at B and D.)

4. FEE FOR PRIORITY DOCUMENT (if applicable) . . . . . 20  P

5. TOTAL FEES PAYABLE . . . . . 1,852

Add amounts entered at T, S, I and P, and enter total in the TOTAL box

TOTAL

 The designation fees are not paid at this time.**MODE OF PAYMENT**

<input checked="" type="checkbox"/> authorization to charge deposit account (see below)	<input type="checkbox"/> postal money order	<input type="checkbox"/> cash	<input type="checkbox"/> coupons
<input checked="" type="checkbox"/> cheque	<input type="checkbox"/> bank draft	<input type="checkbox"/> revenue stamps	<input type="checkbox"/> other (specify): _____

**AUTHORIZATION TO CHARGE (OR CREDIT) DEPOSIT ACCOUNT**

(This mode of payment may not be available at all receiving Offices)

 Authorization to charge the total fees indicated above. (This check-box may be marked only if the conditions for deposit accounts of the receiving Office so permit) Authorization to charge any deficiency or credit any overpayment in the total fees indicated above. Authorization to charge the fee for priority document.

Receiving Office: RO/ US

Deposit Account No.: 060590

Date: 25 July 2003

Name: ONEY, Richard E.

Signature: Richard E. Oney